CHAPTER 252

NATURAL RESOURCES

HOUSE BILL 08-1161

BY REPRESENTATIVE(S) Kefalas and Fischer, Butcher, Carroll M., Frangas, Gagliardi, Green, Levy, McFadyen, McKinley, Primavera, Riesberg, Solano, Soper, Weissmann, Benefield, Casso, Gallegos, Kerr A., Labuda, Madden, McGihon, Merrifield, Peniston, Pommer, Rice, Todd, Curry, and Scanlan;

also SENATOR(S) Johnson, Bacon, Boyd, Gibbs, Romer, Schwartz, Shaffer, Tapia, Taylor, Tochtrop, Tupa, Veiga, Ward, and Wiens

AN ACT

CONCERNING AN INCREASE IN THE REGULATORY AUTHORITY OF THE MINED LAND RECLAMATION BOARD OVER MINING, AND, IN CONNECTION THEREWITH, ENSURING THE PROTECTION OF GROUND WATER AND PUBLIC HEALTH, AND MAKING AN APPROPRIATION.

Be it enacted by the General Assembly of the State of Colorado:

SECTION 1. 34-32-103 (3.5) and (8), Colorado Revised Statutes, are amended, and the said 34-32-103 is further amended BY THE ADDITION OF THE FOLLOWING NEW SUBSECTIONS, to read:

- **34-32-103. Definitions.** As used in this article, unless the context otherwise requires:
 - (3.5) (a) "Designated mining operation" means a mining operation at which:
- (I) Toxic or acidic chemicals used in extractive metallurgical processing are present on site; $\overline{\text{or}}$
- (II) Acid- or toxic-forming materials will be exposed or disturbed as a result of mining operations; OR
- (III) Uranium is developed or extracted, either by in situ leach mining or by conventional underground or open mining techniques. A uranium mining operation may seek an exemption from designated mining operation status in accordance with section 34-32-112.5 (2).

Capital letters indicate new material added to existing statutes; dashes through words indicate deletions from existing statutes and such material not part of act.

- (b) The various types of designated mining operations are identified in section 34-32-112.5. EXCEPT AS PROVIDED IN SUBPARAGRAPH (III) OF PARAGRAPH (a) OF THIS SUBSECTION (3), such mining operations exclude operations which THAT do not use toxic or acidic chemicals in processing for purposes of extractive metallurgy and which THAT will not cause acid mine drainage.
- (5.7) "IN SITU LEACH MINING" MEANS IN SITU MINING FOR URANIUM THROUGH THE IN-PLACE DISSOLUTION OF MINERAL COMPONENTS OF AN ORE DEPOSIT BY CAUSING A CHEMICAL LEACHING SOLUTION, USUALLY AQUEOUS, TO PENETRATE OR TO BE PUMPED DOWN WELLS THROUGH THE ORE BODY AND THEN REMOVING THE MINERAL-CONTAINING SOLUTION FOR DEVELOPMENT OR EXTRACTION OF THE MINERAL VALUES.
- (5.8) "IN SITU MINING" MEANS THE IN-PLACE DEVELOPMENT OR EXTRACTION OF A MINERAL BY MEANS OTHER THAN OPEN MINING OR UNDERGROUND MINING.
- (8) "Mining operation" means the development or extraction of a mineral from its natural occurrences on affected land. The term "MINING OPERATION" includes, but is not limited to, open mining, and IN SITU MINING, IN SITU LEACH MINING, surface operation OPERATIONS, and the disposal of refuse from underground and MINING, in situ mining, AND IN SITU LEACH MINING. The term "MINING OPERATION" ALSO includes the following operations on affected lands: Transportation; concentrating; milling; evaporation; and other processing. The term "MINING OPERATION" does not include: The exploration and extraction of natural petroleum in a liquid or gaseous state by means of wells or pipe; the development or extraction of coal; the extraction of geothermal resources; smelting, refining, cleaning, preparation, transportation, and other off-site operations not conducted on affected land; OR THE EXTRACTION OF CONSTRUCTION MATERIAL WHERE THERE IS NO DEVELOPMENT OR EXTRACTION OF ANY MINERAL.
- **SECTION 2.** The introductory portion to 34-32-110 (2) (a), Colorado Revised Statutes, is amended to read:
- **34-32-110.** Limited impact operations expedited process. (2) (a) Any person desiring to conduct mining operations on less than ten acres, which mining operations will result in the extraction of less than seventy thousand tons of mineral or overburden per calendar year, prior to commencement of mining, shall file with the office, on a form approved by the board, an application for a permit to conduct mining operations; EXCEPT THAT APPLICATIONS FOR IN SITU LEACH MINING SHALL BE FILED PURSUANT TO SECTION 34-32-112.5 (3) (d). This application shall contain the following:
- **SECTION 3.** 34-32-112 (2), Colorado Revised Statutes, is amended BY THE ADDITION OF THE FOLLOWING NEW PARAGRAPHS to read:
- **34-32-112.** Application for reclamation permit changes in permits fees **notice.** (2) The application forms shall state:
- (i) For in situ leach mining operations, a certification by the applicant that no violations exist as described in section 34-32-115 (5) (d). If the applicant is not able to so certify, the applicant shall describe the

CIRCUMSTANCES AS MAY BE RELEVANT TO SECTION 34-32-115 (5) (d) AND PROVIDE THE BOARD OR OFFICE ANY ADDITIONAL INFORMATION REASONABLY REQUESTED REGARDING ANY SUCH CIRCUMSTANCES.

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(j) For in situ leach mining operations, a description of at least five in situ leach mining operations that demonstrates the ability of the applicant to conduct the proposed mining operation without any leakage, vertical or lateral migration, or excursion of any leaching solutions or ground-water-containing minerals, radionuclides, or other constituents mobilized, liberated, or introduced by the in situ leach mining process into any ground water outside of the permitted in situ leach mining area. The fact that the applicant was not involved in any of the five operations shall not preclude the applicant from making the demonstration required by this paragraph (j).

SECTION 4. 34-32-112 (10) (c), Colorado Revised Statutes, is amended to read:

34-32-112. Application for reclamation permit - changes in permits - fees notice. (10) (c) In addition, the applicant shall mail a copy of such notice immediately after first publication to all owners of record of the surface rights of the affected land, to the owners of record of immediately adjacent lands, TO THE OWNERS OF RECORD OF LANDS WITHIN THREE MILES OF AFFECTED LAND FOR IN SITU LEACH MINING OPERATIONS, and to any other persons who are owners of record that may be designated by the board that might be affected by the proposed mining operation. Proof of such notice and mailing, such as certified mail with return receipt requested where possible, shall be provided to the board or the office and become part of the application.

SECTION 5. 34-32-112.5, Colorado Revised Statutes, is amended BY THE ADDITION OF A NEW SUBSECTION to read:

34-32-112.5. Designated mining operation - rules. (5) (a) AN APPLICATION FOR AN IN SITU LEACH MINING OPERATION SHALL INCLUDE A BASELINE SITE CHARACTERIZATION AND A PLAN FOR ONGOING MONITORING OF THE AFFECTED LAND AND AFFECTED SURFACE AND GROUND WATER. PRIOR TO SUBMITTING AN APPLICATION, THE PROSPECTIVE APPLICANT SHALL CONFER WITH THE OFFICE CONCERNING THE BASELINE CHARACTERIZATION AND PLAN FOR ONGOING MONITORING OF THE AFFECTED LAND AND AFFECTED SURFACE AND GROUND WATER. THE BOARD OR THE OFFICE MAY RETAIN AN INDEPENDENT THIRD-PARTY PROFESSIONAL EXPERT TO OVERSEE BASELINE SITE CHARACTERIZATION, MONITOR FIELD OPERATIONS, OR REVIEW ANY PORTION OF THE INFORMATION COLLECTED, DEVELOPED, OR SUBMITTED BY AN APPLICANT OR PROSPECTIVE APPLICANT PURSUANT TO THIS SUBSECTION (5). THE PROSPECTIVE APPLICANT SHALL PAY THE REASONABLE COSTS INCURRED BY THE BOARD OR OFFICE AND THE EXPERT SELECTED BY THE BOARD OR OFFICE; EXCEPT THAT THE BOARD OR OFFICE SHALL DEFINE THE SCOPE OF WORK TO BE ACCOMPLISHED BY THE EXPERT AND SHALL REVIEW AND APPROVE ALL INVOICES TO BE PAID BY THE PROSPECTIVE APPLICANT. THE PROSPECTIVE APPLICANT MAY OBJECT TO THE SELECTION OF ANY SUCH EXPERT IF THE PROSPECTIVE APPLICANT HAS KNOWLEDGE OR INFORMATION THAT THE EXPERT LACKS THE PROFESSIONAL QUALIFICATIONS TO ACCOMPLISH THE SCOPE OF WORK, HAS A CONFLICT OF INTEREST WITH THE PROSPECTIVE APPLICANT OR THE PROJECT THAT WILL BE THE SUBJECT OF THE APPLICATION, OR HAS A BIAS THAT COULD INFLUENCE THE OBJECTIVITY OF THE WORK TO BE ACCOMPLISHED. IF THE BOARD OR OFFICE CONCURS WITH THE PROSPECTIVE APPLICANT, A NEW EXPERT SHALL BE SELECTED BY THE BOARD OR OFFICE.

- (b) PRIOR TO SUBMITTING AN APPLICATION, A PROSPECTIVE APPLICANT FOR IN SITU LEACH MINING SHALL DESIGN AND CONDUCT A SCIENTIFICALLY DEFENSIBLE GROUND WATER, SURFACE WATER, AND ENVIRONMENTAL BASELINE CHARACTERIZATION AND MONITORING PLAN FOR THE PROPOSED MINING OPERATION. THIS PLAN SHALL BE DESIGNED IN SUCH A MANNER AS TO:
 - (I) THOROUGHLY CHARACTERIZE PREMINING SITE CONDITIONS;
- (II) DETECT ANY SUBSURFACE EXCURSIONS OF GROUND WATER CONTAINING CHEMICALS USED IN OR MOBILIZED BY IN SITU LEACH MINING DURING THE MINING OPERATIONS; AND
- (III) EVALUATE THE EFFECTIVENESS OF POSTMINING RECLAMATION AND GROUND WATER RECLAMATION PLANS.
- (c) The design and operation of the baseline characterization and monitoring plan for in situ leach mining, together with all information collected in accordance with the plan, shall be a matter of public record regardless of whether such activities are conducted pursuant to a notice of intent to conduct prospecting operations under section 34-32-113.
- (d) (I) Notwithstanding section 34-32-103 (6), in the case of in situ leach mining, reclamation of ground water shall begin in accordance with the reclamation plan approved by the board immediately when either of the following occur:
- (A) DETECTION PURSUANT TO THE BASELINE CHARACTERIZATION AND MONITORING PLAN APPROVED BY THE BOARD OF ANY SUBSURFACE EXCURSION OF GROUND WATER OUTSIDE OF THE AFFECTED LAND CONTAINING CHEMICALS USED IN OR MOBILIZED BY IN SITU LEACH MINING DURING THE MINING OPERATIONS OR GROUND WATER OUTSIDE OF THE AFFECTED LAND THAT OTHERWISE FAILS TO MEET THE STANDARDS ESTABLISHED IN SECTION 34-32-116 (8);
 - (B) CESSATION OF PRODUCTION OPERATIONS.
- (II) IF THE OPERATOR PLANS TO CEASE OPERATION ON A TEMPORARY BASIS, THE OPERATOR SHALL NOTIFY THE BOARD AT LEAST THIRTY DAYS PRIOR TO SUCH TEMPORARY CESSATION SETTING FORTH BOTH THE REASONS FOR THE TEMPORARY CESSATION AND THE EXPECTED DURATION OF THE TEMPORARY CESSATION. THE OPERATOR SHALL MAINTAIN A GROUND WATER MONITORING AND PUMPING REGIME SATISFACTORY TO THE BOARD DURING ANY PERIOD OF TEMPORARY CESSATION OF OPERATIONS. IF, IN THE JUDGMENT OF THE BOARD, THE EXPECTED DURATION OF ANY TEMPORARY CESSATION WILL BE OF SUCH LENGTH THAT THE BOARD BELIEVES THAT GROUND WATER RECLAMATION SHOULD COMMENCE, IT SHALL SO ORDER.

SECTION 6. 34-32-115 (2), Colorado Revised Statutes, is amended, and the said 34-32-115 is further amended BY THE ADDITION OF A NEW SUBSECTION, to read:

- 34-32-115. Action by board appeals. (2) Prior to the holding of any such hearing, the board or the office shall provide notice to any person previously filing a protest or petition for a hearing or statement in support of an application pursuant to section 34-32-114 and shall publish notice of the time, date, and location of the hearing in a newspaper of general circulation in the locality of the proposed mining operation once a week for two consecutive weeks immediately prior to the hearing. The hearing shall be conducted as a proceeding pursuant to article 4 of title 24, C.R.S. A final decision on the application shall be made within one hundred twenty days of AFTER the receipt of the application. In the event of complex applications, serious unforeseen circumstances, or significant snow cover on the affected land that prevents a necessary on-site inspection, the board or the office may reasonably extend the maximum time sixty days. IN THE EVENT OF IN SITU LEACH MINING OPERATIONS, A FINAL DECISION ON THE APPLICATION WILL BE MADE WITHIN TWO HUNDRED FORTY DAYS.
- (5) (a) THE BOARD OR THE OFFICE MAY DENY A PERMIT FOR IN SITU LEACH MINING OPERATIONS BASED ON SCIENTIFIC OR TECHNICAL UNCERTAINTY ABOUT THE FEASIBILITY OF RECLAMATION AND SHALL DENY SUCH A PERMIT IF THE APPLICANT FAILS TO DEMONSTRATE THAT RECLAMATION CAN AND WILL BE ACCOMPLISHED IN COMPLIANCE WITH THIS ARTICLE, INCLUDING THE PROTECTION OF GROUND WATER AND OTHER ENVIRONMENTAL RESOURCES AND HUMAN HEALTH.
- (b) THE BOARD OR THE OFFICE SHALL DENY A PERMIT FOR IN SITU LEACH MINING IF THE APPLICANT FAILS TO DEMONSTRATE BY SUBSTANTIAL EVIDENCE THAT IT WILL RECLAIM ALL AFFECTED GROUND WATER FOR ALL WATER QUALITY PARAMETERS THAT ARE SPECIFICALLY IDENTIFIED IN THE BASELINE SITE CHARACTERIZATION, OR IN THE STATEWIDE RADIOACTIVE MATERIALS STANDARDS OR TABLES 1 THROUGH 4 OF THE BASIC STANDARDS FOR GROUND WATER AS ESTABLISHED BY THE COLORADO WATER QUALITY CONTROL COMMISSION, TO EITHER OF THE FOLLOWING:
- (I) PREMINING BASELINE WATER QUALITY OR BETTER, AS ESTABLISHED BY THE BASELINE SITE CHARACTERIZATION CONDUCTED PURSUANT TO SECTION 34-32-112.5 (5): OR
- (II) THAT QUALITY WHICH MEETS THE STATEWIDE RADIOACTIVE MATERIALS STANDARDS AND THE MOST STRINGENT CRITERIA SET FORTH IN TABLES 1 THROUGH 4 OF THE BASIC STANDARDS FOR GROUND WATER AS ESTABLISHED BY THE COLORADO WATER QUALITY CONTROL COMMISSION.
- (c) THE BOARD OR THE OFFICE MAY DENY A PERMIT FOR IN SITU LEACH MINING IF THE EXISTING OR REASONABLY FORESEEABLE POTENTIAL FUTURE USES FOR ANY POTENTIALLY AFFECTED GROUND WATER, WHETHER CLASSIFIED OR UNCLASSIFIED PURSUANT TO SECTION 25-8-203, C.R.S., INCLUDES DOMESTIC OR AGRICULTURAL USES, AND THE BOARD DETERMINES THE IN SITU LEACH MINING WILL ADVERSELY AFFECT THE SUITABILITY OF THE GROUND WATER FOR SUCH USES.
 - (d) THE BOARD OR THE OFFICE MAY DENY OR REVOKE A PERMIT FOR IN SITU

LEACH MINING IF:

- (I) The applicant, an affiliate, officer, or director of the applicant, the operator, or the claim holder has demonstrated a pattern of willful violations of the environmental protection requirements of this article, rules promulgated pursuant to this article, a permit issued pursuant to this article, or an analogous law, rule, or permit issued by another state or the United States as disclosed in the application pursuant to section 34-32-112 (2) (i);
- (II) (A) EXCEPT AS SPECIFIED IN SUB-SUBPARAGRAPH (B) OF THIS SUBPARAGRAPH (II), THE APPLICANT OR ANY AFFILIATE, OFFICER, OR DIRECTOR OF THE APPLICANT HAS IN THE TEN YEARS PRIOR TO SUBMISSION OF THE APPLICATION VIOLATED THE ENVIRONMENTAL PROTECTION REQUIREMENTS OF THIS ARTICLE, RULES PROMULGATED PURSUANT TO THIS ARTICLE, A PERMIT ISSUED PURSUANT TO THIS ARTICLE, OR AN ANALOGOUS LAW, RULE, OR PERMIT ISSUED BY ANOTHER STATE OR THE UNITED STATES AS DISCLOSED IN THE APPLICATION PURSUANT TO SECTION 34-32-112 (2) (i).
- (B) The board or office may issue or reinstate a permit if the applicant submits proof that the violation referred to in sub-subparagraph (A) of this subparagraph (II) has been corrected or may conditionally issue or reinstate a permit if the violation is in the process of being corrected to the satisfaction of the board or if the applicant submits proof that the applicant has filed and is presently pursuing a direct administrative or judicial appeal to contest the validity of the alleged violation. For purposes of this sub-subparagraph (B), a direct administrative or judicial appeal to contest the validity of the alleged violation shall not include an appeal of an applicant's relationship to an affiliate. If the violation is not successfully abated or if the violation is upheld on appeal, the board or office shall revoke or deny the conditional permit issued or reinstated pursuant to this sub-subparagraph (B).
- **SECTION 7.** The introductory portion to 34-32-116 (7) (q) and 34-32-116 (7) (q) (III), Colorado Revised Statutes, are amended, and the said 34-32-116 is further amended BY THE ADDITION OF THE FOLLOWING NEW SUBSECTIONS, to read:
- **34-32-116. Duties of operators reclamation plans.** (7) Reclamation plans and the implementation thereof shall conform to the following general requirements:
- (q) All reclamation provided for in this section shall be carried to completion by the operator with all reasonable diligence and shall be conducted concurrently with mining operations to the extent practicable, taking into consideration the mine plan, mine safety, economics, the availability of equipment and material, and other site-specific conditions relevant and unique to the affected land and to the postmining land use. Upon termination of the entire mining operation and in accordance with the reclamation plan, each phase of final reclamation shall be completed prior to the expiration of WITHIN five years after the date on which the operator advises the board that such phase has commenced, unless such period is extended by the board pursuant to section 34-32-112 (7); except that:

- (III) (A) With the approval of the board and the owner of the land to be reclaimed, the operator may substitute land previously mined and owned by the operator not otherwise subject to reclamation under this article or, in the alternative, with the approval of the board and the owner of the land, reclamation of an equal number of acres of any lands previously mined but not owned by the operator if the operator has not previously abandoned unreclaimed mining lands. The board also has authority to grant, in the alternative, the reclamation of lesser or greater acreage so long as the cost of reclaiming such acreage is at least equivalent to the cost of reclaiming the original permit lands. If any area is so substituted, the operator shall submit a map of the substituted area, which map shall conform to all of the requirements with respect to other maps required by this article. Upon completion of reclamation of the substituted land, the operator shall be relieved of all obligations under this article with respect to the land for which substitution has been permitted.
- (B) SUB-SUBPARAGRAPH (A) OF THIS SUBPARAGRAPH (III) SHALL NOT APPLY TO URANIUM OR IN SITU LEACH MINING.
- (8) ALL URANIUM EXTRACTION OPERATIONS USING IN SITU LEACH MINING OR RECOVERY METHODS, INCLUDING ANY INJECTION OF ANY CHEMICALS DESIGNED TO MOBILIZE URANIUM RESOURCES, SHALL RECLAIM ALL AFFECTED GROUND WATER FOR ALL WATER QUALITY PARAMETERS THAT ARE SPECIFICALLY IDENTIFIED IN THE BASELINE SITE CHARACTERIZATION, OR IN THE STATEWIDE RADIOACTIVE MATERIALS STANDARDS OR TABLES 1 THROUGH 4 OF THE BASIC STANDARDS FOR GROUND WATER AS ESTABLISHED BY THE COLORADO WATER QUALITY CONTROL COMMISSION, TO EITHER OF THE FOLLOWING:
- (a) Premining baseline water quality or better as established by the baseline site characterization conducted pursuant to section 34-32-112.5 (5); or
- (b) That quality which meets the statewide radioactive materials standards and the most stringent criteria set forth in tables 1 through 4 of the basic standards for ground water as established by the Colorado water quality control commission. In establishing, designing, and implementing a ground water reclamation plan, the mine operator shall use best available technology.
- (9) OPERATORS OF IN SITU LEACH MINING OPERATIONS SHALL TAKE ALL NECESSARY STEPS TO PREVENT AND REMEDIATE ANY DEGRADATION OF PREEXISTING GROUND WATER USES DURING THE PROSPECTING, DEVELOPMENT, EXTRACTION, AND RECLAMATION PHASES OF THE OPERATION.
 - **SECTION 8.** 34-32-121.5, Colorado Revised Statutes, is amended to read:
- **34-32-121.5. Reporting certain conditions.** Any person engaged in any A mining operation shall notify the office of any failure or imminent failure as soon as reasonably practicable after such person has knowledge of such condition, BUT FOR IN SITU LEACH MINING OPERATIONS IN NO EVENT MORE THAN TWENTY-FOUR HOURS AFTER THE DISCOVERY OF SUCH FAILURE OR AN IMMINENT FAILURE, of: Any impoundment, embankment, or slope that poses a reasonable potential for danger

to any persons or property or to the environment; ANY STRUCTURE FOR IN SITU LEACH MINING OPERATIONS DESIGNED TO DETECT, PREVENT, MINIMIZE, OR MITIGATE ADVERSE IMPACTS ON GROUND WATER; ANY STRUCTURE USED IN CONNECTION WITH IN SITU LEACH MINING DESIGNED TO DETECT, PREVENT, MINIMIZE, OR MITIGATE ADVERSE IMPACTS ON HUMAN HEALTH, WILDLIFE, OR THE ENVIRONMENT; or any environmental protection facility designed to contain or control chemicals or waste which THAT are acid- or toxic-forming, as identified in the permit.

- **SECTION 9. Appropriation.** (1) In addition to any other appropriation, there is hereby appropriated, out of any moneys in the mined land reclamation fund created in section 34-32-127, Colorado Revised Statutes, not otherwise appropriated, to the department of natural resources, for the fiscal year beginning July 1, 2008, the sum of forty-two thousand five hundred forty dollars (\$42,540) cash funds and 0.4 FTE, or so much thereof as may be necessary, for the implementation of this act.
- (2) In addition to any other appropriation, there is hereby appropriated to the department of law, for the fiscal year beginning July 1, 2008, the sum of fourteen thousand four hundred six dollars (\$14,406), or so much thereof as may be necessary, for the provision of legal services to the department of law related to the implementation of this act. Said sum shall be from reappropriated funds received from the department of natural resources out of the appropriation made in subsection (1) of this section.
- **SECTION 10. Applicability.** This act shall apply to mining applications currently filed or filed on or after the effective date of this act and to mining operations currently permitted or permitted on or after the effective date of this act.
- **SECTION 11. Safety clause.** The general assembly hereby finds, determines, and declares that this act is necessary for the immediate preservation of the public peace, health, and safety.

Approved: May 20, 2008